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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,913	08/25/2003	Yisong Yu	91464/JLT	2332
1333	7590	02/10/2006	EXAMINER	
BETH READ PATENT LEGAL STAFF EASTMAN KODAK COMPANY 343 STATE STREET ROCHESTER, NY 14650-2201			LEE, SIN J	
			ART UNIT	PAPER NUMBER
			1752	

DATE MAILED: 02/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/647,913	YU ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Sin J. Lee	1752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 18 November 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-10,12,14-22,24-32,34-41,45-51,53-59,62-67,69-75 and 77 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,2,4-10,12,14-22,24-32,34-41,45-51,53-59,69-75 and 77 is/are allowed.
- 6) ☒ Claim(s) 62-67 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>11-18-05</u> | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. Applicants canceled claims 3, 11, 13, 23, 33, 42-44, 52, 60, 61, 68, 76 and 78.
2. In view of the amendment filed on November 18, 2005, previous 102(b) rejection on claims 1-8 and 45-49 over Tanaka et al (EP'088), previous 103(a) rejection on claims 9, 10, 21-30, 50 and 51 over Tanaka et al (EP'088) and previous 103(a) rejection on claims 11, 31, 53, 61 and 69 over Ishida et al'556 are hereby withdrawn.
3. Due to newly cited prior art, the following rejection is made non-final.

### ***Claim Rejections - 35 USC § 103***

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
5. Claims 62-67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue et al (US 2002/0007751 A1).

Inoue teaches a negative working lithographic printing plate precursor comprising a hydrophilic support having thereon a heat-sensitive layer containing at least one of a thermoplastic particulate polymer, *a particulate polymer having a heat-reactive group* and a microcapsule containing a compound having a heat-reactive group incorporated therein (see abstract and [0011] Example 1). For the particulate polymer having heat-reactive group, Inoue teaches (meth)acrylic acid as one of the examples for the monomer having the heat-reactive functional group (see [0025]-[0027]). Inoue furthermore teaches (see [0028]) that the monomer having heat-reactive functional group can be copolymerized with monomers such as styrene. Therefore, it would have

been obvious to one skilled in the art to have a *copolymer of (meth)acrylic acid and styrene* as Inoue's particulate polymer having a heat-reactive group with a reasonable expectation of obtaining a lithographic printing plate precursor having a good on-the-machine developability, a high sensitivity and a high impression capacity. Therefore, Inoue renders obvious present copolymer of hydrophobic monomer and a monomer that has a carboxylic group. Inoue furthermore teaches ([0071]-[0073]) the use of hydrophilic resin (such as *cellulose or starch derivative or a resin including an amino group*) in his heat-sensitive layer in order to improve the on-the machine-developability as well as enhance the strength of the heat-sensitive layer itself. Therefore, Inoue teaches present hydrophilic polymer. Inoue also teaches the use of a light-to-heat converting agent which absorbs light having wavelength of not lower than 700 nm ([0096]-[0099]). Therefore, Inoue's teaching renders obvious present inventions of claims 62-67.

#### ***Allowable Subject Matter***

6. Claims 1, 2, 4-10, 12, 14-22, 24-32, 34-41, 45-51, 53-59, 69-75 and 77 are allowed. Tanaka et al (EP'088), Ishida et al'556 or Inoue et al'751 does not teach or suggest present polymer particles of claims 1 and 45, each of which has to comprise thermally softenable hydrophobic polymer, hydrophilic polymer and bonding agent chemically bonded to the hydrophobic polymer and to the hydrophilic polymer. None of the cited prior arts teaches or suggests present hydrophilic polymer and a copolymer of a hydrophobic monomer and a bonding monomer, the bonding monomer chemically

bonded to the hydrophilic polymer and to the hydrophobic monomer as claimed in present claims 12, 53 and 54. None of the cited prior arts teaches or suggests present copolymer comprising a hydrophilic polymer, a hydrophobic monomer and a monomer that has a carboxylic group as claimed in present claim 21. None of the cited prior arts teaches or suggests present hydrophilic polymer particles comprising a hydrophilic polymer and a copolymer of a hydrophobic monomer and a monomer that has a carboxylic group as claimed in present claims 31, 32, 69 and 70. None of the cited prior arts teaches or suggests present particles comprising chitosan and a thermally softenable hydrophobic polymer as claimed in present claims 41 and 77.

Huang et al'994 does not teach present inventions because his printing plate precursor is aqueous eluable when coated and dried (in the development step, the unexposed portions are removed).

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sin J. Lee whose telephone number is 571-272-1333. The examiner can normally be reached on Monday-Friday from 9:00 am EST to 5:30 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly, can be reached on 571-272-1526. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

Art Unit: 1752

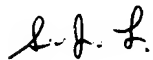
published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

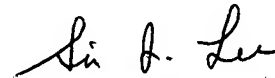
you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).



S. Lee

February 6, 2006



**SIN LEE**  
**PRIMARY EXAMINER**